
Chapter Six

ILLICIT WASTE DISPOSAL

Summary of Findings

1. *The basic nature of illegal dumping makes it a difficult problem to combat.*
2. *The "shallow pockets" of fly-by-night dumpers often limits the amount of damages that can be recovered through litigation.*

The involved agencies do what they can with the resources they have to respond to illegal dumping, especially with regard to addressing citizen concerns while emphasizing to the public the extreme difficulty of their enforcement task. The bottom line is that agency managers know they can never eliminate the problem completely. There always will be disreputable firms and individuals that lack the ethics or the community-mindedness to ignore the incentives to dump waste illegally. However, some agency officials believe that illegal dumping is not the most severe of environmental threats, provided that hazardous substances are not involved. Nevertheless, dumped materials often are a highly visible sign of "pollution" to a more environmentally-sensitive public. As a result, local agencies must maintain their ability to respond as promptly and effectively as possible under the circumstances.

Action Recommendations

Action: *The involved agencies should explore the need for more formal coordination of their individual response, investigation, and enforcement activities.*

Involved Agencies:

- Texas Water Commission
- Texas Department of Health
- Harris County Pollution Control Department
- Cities
- U.S. Environmental Protection Agency

Rationale: The Armand Bayou watershed provides a fitting example of the multiple, and sometimes overlapping, jurisdictions involved in

illegal dumping response and investigation. There are four cities, the county, several state agencies, and the EPA (in extreme cases) which may be involved. It is a top-down system: EPA deals mostly with the states and only rarely with local agencies; state and local personnel sometimes coordinate their activities, and county and city staff continue to study how they might work together more effectively, with more substantial funding support from the state. The agencies should determine whether any or all of them would benefit from establishing formal mechanisms to coordinate their activities more closely.

Action: *The involved agencies should consider ways to enhance existing mechanisms for receiving and responding to citizen complaints.*

- Involved Agencies:
- Texas Water Commission
 - Texas Department of Health
 - Harris County Pollution Control Department
 - Cities
 - U.S. Environmental Protection Agency

Rationale: Citizen reporting is clearly one of the most valuable sources of information on illegal dumping activity. The agencies should determine how this communication might be facilitated, especially to encourage citizens to report suspicious activity as quickly as possible. The idea was raised of designing effective public service announcements to make children and adults aware of the problem and educate them on the important role they can play. Such announcements also should highlight the key agencies and numbers to call. In addition, the agencies should monitor the efforts of the City of Houston's environmental health division to encourage community-based environmental programs.

**Armand Bayou Management Framework:
ILLICIT WASTE DISPOSAL**

AGENCY	AUTHORITY	POLICY	STRATEGY	ACTORS
HCPC	<ol style="list-style-type: none"> 1. Texas Water Code, Chapter 26 2. Texas Health and Safety Code, Ch. 341, 343 and 365 (Texas Litter Abatement Act) 3. Harris County Commissioners Court resolutions 	<ol style="list-style-type: none"> 1. Harris County Commissioners Court 2. HCPC Director 	<ol style="list-style-type: none"> 1. Field surveillance 2. Investigation of citizen complaints and problems observed in the field 3. Civil and criminal enforcement action 4. Coordination with municipal and state agencies on clean-up procedures 	<ol style="list-style-type: none"> 1. HCPC Director 2. Field Investigators 3. Laboratory Analysts 4. Harris County Attorney 5. Harris County Commissioners Court

Management Concern: ILLICIT WASTE DISPOSAL

Background

This chapter focuses on random dumping, as opposed to long-term accumulation of waste at an established commercial site (especially abandoned hazardous waste sites that are addressed through the Superfund program) or unauthorized disposal practices at a permitted waste handling facility. Although these other activities are equally challenging for regulatory agencies in terms of monitoring and being able to prove wrongdoing, the illegal dumping problem is especially frustrating for the involved agencies because of its "hit and run" nature.

Illicit disposal activity may include everything from a lone barrel dumped along the roadside to worn-out household appliances, abandoned automobiles and debris scattered on a vacant site, liquid wastes pumped into streams or manholes, and used motor oil and other household hazardous wastes poured into storm sewer catch basins. A chief concern near populated areas is the potential threat to public health from illegally dumped materials. The dangers of hazardous wastes are obvious, especially in cases where they are dumped at the end of a dead-end street in a residential neighborhood and children at play are unaware of the risk. More ordinary solid wastes are primarily a visual blight, although accumulated trash may quickly attract insects and rodents and pose a health and safety threat as well. Whatever the category of waste, natural areas often are degraded by dumping, and pollutants from the waste may be carried to nearby streams or cause contamination of ground water resources.

The challenge for the involved agencies is that they are always in a reactive mode, unless by coincidence their field personnel happen to spot an illegal dumper in the act, which is rare. The system relies upon citizen reporting of suspicious activities. While this is a valuable source of information for the agencies, it often places them in the position of having to demonstrate some type of progress to the concerned citizen, even if there is little information or evidence with which to work. Clean-up also must be done promptly in cases where dangerous materials are involved or valuable resources are threatened. This places a burden on government agencies since it often will take them much longer to track down the responsible party, and even then they are not guaranteed of receiving any damage payments.

The key management dilemma is how to overcome the costs and inconvenience that are an inevitable part of many legal waste disposal methods, particularly so that the least scrupulous waste handlers are not tempted by the incentives to dump waste illegally. It may be an unavoidable problem, which means that the management agencies must focus on facilitating citizen reporting and maintaining superior response capabilities.

Nature of the Problem at Armand Bayou

There is little information on the extent and significance of illegal dumping activity in the Armand Bayou watershed. Anecdotal evidence suggests that it is a particular concern of city and county agencies that must deal with the problem on a regular basis. This primarily involves county pollution control staff and municipal health personnel. But City of Pasadena public works staff also have reported ongoing cases of vacuum trucks dumping wastes directly into the city's manhole network.

The major concern is that the Armand Bayou watershed still includes much vacant, undeveloped land that is in close proximity to extensive industrial and urbanized areas. If the desire to dump illegally is present, the conditions are right: unlighted roads, isolated sites, and unincorporated areas that are covered by a widely-dispersed county sheriff's patrol. Unfortunately, the conditions for environmental pollution also are ideal, especially due to the high water table in the Armand Bayou watershed and surrounding coastal areas where ground water contamination is always a possibility. Numerous natural streams and man-made drainage channels in the area also increase the chance that an isolated dumping incident can cause impacts far downstream, which, in the case of Armand Bayou, means Clear Lake and possibly Galveston Bay.

Key Management Agencies

Harris County Pollution Control Department (HCPC)

The Harris County Pollution Control Department joins local, state and federal agency investigators in responding to reports of illegal dumping activity. Which agency responds first and assumes the lead role depends on where the materials are dumped, the nature of the materials, and the seriousness of the situation.

Together with municipal environmental health personnel, HCPC considers itself the first point of contact for citizens affected by illegal dumping. The department responds to citizen complaints, routinely investigates dumping incidents, and pursues enforcement action against responsible parties in those instances when a solid case can be assembled. HCPC coordinates with state and federal agencies in the most serious cases involving hazardous or other formidable types of waste.

The combination of the Texas Water Code and the Texas Health and Safety Code enables HCPC to combat dumping of waste on land and water. Chapter 26 of the Water Code prohibits unauthorized discharges of pollutants into "waters of the state." A violation may occur even if materials are not dumped directly into a water body since pollutants may be transmitted to surface water or seep into ground water. Chapter 365 of the Health and Safety Code, known as the Texas Litter Abatement Act, covers most other forms of unauthorized waste disposal that are not addressed by the Water Code or other laws. This includes dumping refuse on or near a highway, as well as from a boat or motor vehicle into the state's inland or coastal waters. The Water Code allows HCPC to

pursue civil or criminal penalties against violators. A civil suit may result in an injunction and/or penalties of \$50 to \$10,000 per day of the violation. Criminal prosecution of a misdemeanor charge may result in a penalty of \$10 to \$10,000 per day. In a suit that is initiated by a county, the penalties are divided equally between the state and the county. The Health and Safety Code also allows a county or district attorney to bring suit to obtain an injunction or penalties. Violation of the Texas Litter Abatement Act is a criminal offense. What is notable about the Abatement Act is that persons who are (or will be) affected by illegal dumping also may file suit against the violator. Other chapters of the Health and Safety Code enable local authorities to require the abatement of public nuisances, which includes many forms of illegal dumping and accumulation of trash on private property. Various civil and criminal enforcement tools are available if an initial written notice does not result in a clean-up of the site within a reasonable amount of time.

The Harris County Pollution Control Department was created by the Commissioner's Court in 1953. While the state statutes were meant to encourage local government assistance for state agencies with limited field staff, HCPC also emphasizes its role as the most accessible level of government for citizens with pollution complaints or concerns. HCPC staff also must be prepared to respond to the requests and inquiries of the county's elected officials. The department's current staffing includes an appointed Director, 12 laboratory personnel and 15 field investigators. Other personnel are involved in case preparation, data analysis and other duties, giving the department a total staff of 52. The agency maintains a flexible staffing approach which allows it to shift personnel between functions as needed.

HCPC may file suit in response to a violation or in anticipation of one. But considerable preparation must precede any court action. Although most violations detected by HCPC are minor, the agency must decide whether to use litigation if its preliminary enforcement steps are not effective. At that point, the County Attorney is notified and a case is developed using HCPC field data and investigative findings. State statutes require that the Harris County Commissioners Court authorize lawsuits against alleged violators. Upon approval of a resolution, the County Attorney prepares a legal brief and requests that the case be placed on the District Court docket. The statutes also require that the appropriate state agency become a party to any local suit. The required involvement of the agencies is sometimes delegated to the Texas Attorney General's Office.

Other Involved Agencies (TWC, TDH)

Under the Texas Water Code, the Texas Water Commission has primary responsibility for pursuing enforcement action against firms and individuals who illegally discharge pollutants into streams and water bodies. The Water Commission's field offices provide the agency's first level of response to citizen complaints on a range of matters, including illegal dumping. The Field Operations Division receives public and official violation reports and coordinates TWC's investigation and response. The Water Commission's literature instructs citizens to call an Austin hotline or the nearest TWC district office. A complaints coordinator based in Austin maintains records of all complaints and notifies

the appropriate district office if a field investigation is warranted. TWC staff attempt to contact the citizen caller within two working days to schedule an investigation visit. The caller is later notified of the results of the investigation. If the investigation continues for an extended period, quarterly status reports are filed.

TWC's Hazardous and Solid Waste Division administers the Texas Emergency Response Center, which is focused more toward accidental spills than pre-meditated dumping activities. The center is a central receiving point for reports from across the state of oil or hazardous material spills. The center's hotline takes calls on a 24-hour basis, and the center coordinates clean-up procedures. The center also periodically updates the *State of Texas Oil and Hazardous Substances Spill Contingency Plan*, which includes spill response maps for Texas counties. TWC's Field Operations Division provides field support for emergency response activities. Field investigators from the appropriate division office make an on-the-scene assessment of reported chemical and waste spills. Field personnel also respond to major emergency situations where significant environmental damage may occur. The U.S. Environmental Protection Agency provides technical assistance, funding, and investigative support to state agencies such as the Water Commission that are involved in permitting and enforcement of hazardous and solid waste activities. In Texas, the Water Commission is responsible for regulating hazardous waste and non-hazardous industrial solid waste, while the Texas Department of Health administers municipal solid waste programs.

The Surveillance and Enforcement Division of TDH's Solid Waste Management Branch investigates illegal dumping activities under its jurisdiction. Ground water monitoring data often is collected and analyzed to check for contamination problems at disposal sites. If sufficient evidence can be gathered, TDH may request that the Texas Attorney General's office pursue a civil suit in district court. TDH region staff report that the Texas Litter Abatement Act has been a great help to their agency in combatting illegal dumping.

Many state agency programs today feature a stronger emphasis on pollution prevention, reflecting the influence and guidance of EPA. TDH is promoting waste minimization techniques, particularly recycling and reuse of troublesome waste materials such as used tires. TWC's Hazardous and Solid Waste Enforcement Section helps to organize pesticide and household hazardous waste "amnesty" days throughout the state. The Texas General Land Office also has demonstrated its interest in supporting the lead agencies involved with recycling and hazardous waste management. These types of preventive strategies should help to reduce to some extent the illegal dumping problem.

Management Evaluation Findings

1. *The basic nature of illegal dumping makes it a difficult problem to combat.*

Agency staff say that most illegal dumping activity is like a "shot in the dark." There often are few leads to follow, so city and county response agencies have little

chance of identifying and locating the responsible parties. This is why citizen reporting and quick response are so important. In the case of certain materials, the evidence may literally wash away if the dump site is not discovered in time. If illegal activity can be documented, then the involved agencies try to prosecute violators to the fullest extent of the law. The Environmental Protection Agency reports that the conviction rate actually is high, but most cases are very difficult to prove, if they get to court at all. The process of gathering evidence, building a case, and then getting on the court docket can be tedious and time-consuming. Apparently pollution cases are not receiving the preferential scheduling that they once did. This only adds to the time that it takes to resolve a case and show results.

Some staff members say that the illegal dumping situation in the Houston area has reached a crisis stage, both in terms of the seriousness of the materials being dumped and the growing geographic extent of the problem. Hazardous waste is no longer an isolated problem found only in industrial areas. This increases the cost and difficulty of agency monitoring efforts. It also has increased constituent pressure on local politicians, who are turning to their pollution control staff for results. Some agency staff suspect that illegal dumping probably has not increased a great deal, but the public is more aware now and quicker to report illegal activity. They also believe that many dumpers do not perceive what they are doing as an immediate threat to the environment. They do not understand the costs to the public of their behavior or the potential widespread, cumulative impact of dumped materials, especially in the coastal zone. Those who are fully aware of the high stakes involved in waste transport and disposal are becoming increasingly belligerent. In some cases illegal dumpers have been found carrying weapons when confronted, which makes the enforcement task that much more dangerous for agency personnel. Their managers emphasize that pollution control personnel are not commissioned peace officers. Without police power authority, they are limited in what they can do on the spot. They cannot arrest individuals or even force them to reveal their name or affiliation. They must have a court order and a police officer at their side to intervene. Agency officials emphasize that their staff would need specialized training to respond to criminal activities directly.

In general, agency officials are concerned that the costs of legal disposal, especially for special wastes and hazardous materials, are becoming prohibitive for more and more waste generators. One agency manager admitted being more afraid of the unintended consequences of tough hazardous waste regulations than of hazardous waste itself.

2. *The "shallow pockets" of fly-by-night dumpers often limits the amount of damages that can be recovered through litigation.*

The desire of the public and enforcement staff for "massive" punishment of illegal dumpers is undercut by the reality of who is dumping. Local governments and taxpayers end up covering the cost of cleaning up illegally dumped materials. In the meantime, the costs of training and equipment -- and of basic program

administration -- continue to grow. One manager said that it seems that the more agencies try to confront the problem, the greater the need becomes. Dumped materials are becoming more "exotic," requiring more time and expense for analysis and removal. In the end, the agencies that respond to the problem must follow the increasingly demanding disposal procedures that the illegal dumper was unwillingly or unable to meet.